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THE LIMITATIONS OF INTERNAL THERA-  
PEUTICS IN SKIN DISEASES

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## THE LIMITATIONS OF INTERNAL THERAPEUTICS IN SKIN DISEASES.\*

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I WOULD like to approach the consideration of this question from a purely empirical standpoint, uninfluenced by theories and traditions, and supported only by the results of observations made and recorded in ways recognized as strictly scientific, although fully conscious that etiology and pathology, were our knowledge sufficiently advanced, should form the groundwork of rational discussion of the subject. Cutaneous pathology offers in fact an exceptional field for studying the action of drugs introduced through the stomach, for not only are all the means ordinarily availed of in judging their effect in general diseases at the service of the dermatologist, he has also the opportunity of watching directly the phenomena of tissue change or modification of function he is aiming to effect. The most marked progress in the management of certain regional diseases has resulted from the success of modern skill in creating similar favorable opportunities for direct observation and local treatment through the use of the laryngoscope, rhinoscope, ophthalmoscope, endoscope, etc. And yet, with all this advantage, who would venture to claim that

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internal therapeutics in cutaneous disease is in any degree more fixed in its system, or satisfactory in its results, than in general medicine? This is not due to lack of enterprise certainly, for it may truly be claimed that both in historic and modern medicine, every drug known to science has been freely administered in the treatment of skin diseases. Novelties in this, as in all departments of therapeutics, have appeared thickly along the course of the past centuries, have worked their marvellous cures, have been awarded even the saintly title *specificum*, and have been forgotten. Some have been revived for brief periods to sink finally into oblivion. Some have survived to the present day in restricted centres, remnants of barbaric medicine, saved through superstition, patriotism, or loyalty to inherited theory. Some, a very few, have secured and retain a universal and well-proved reputation as serviceable agents in limited fields of usefulness. The vast and varied materia medica, then, of the past and present, has by elimination reduced itself to a very few substances, which are universally recognized as of some service in the treatment of skin diseases when administered internally, and to a somewhat larger class, constantly changing, which enjoy with individual dermatologists or with national schools the reputation of active and important agents, while by others they are regarded as completely worthless. These differences of belief, by no means confined to the practice of dermatology, furnish the illustration of the difficulty first alluded to: the impossibility of coming to any fixed and definite doctrine of general therapeutics in the face of all these conflicting views of individual writers and schools. We see the optimist ready to believe good of all the articles of the materia medica, forced indeed by the very universalism of this confidence to be constantly putting aside the old for the latest new remedies; we see the most conservative and experienced master making acknowledgment late in life that his scepticism with regard to the action of certain drugs was erroneous. One school expresses a sure belief in the great importance of some simple herb in a great class of disorders, while their rivals across some geographical boundary line ridicule such

simplicity. A most respected author states that there is no more reliable remedy in certain infantile dermatoses than some drug, which another distinguished dermatologist reports after prolonged trial to be valueless.

Allowing for all possible variations in the action of these drugs, in the character of the disease, or the constitution of the patient, due to geographical or race differences, the chief cause of such diversity of opinion must be improper methods of experimentation or observation employed, or the unscientific or unreliable conclusions of the observers. So contradictory, so unsatisfactory must the therapeutics of our branch of medicine remain, until better methods of study are adopted and the faults of individualism eradicated from it. These elements of error,—the bias of early teachings, prejudices against particular schools, subserviency to mere theorizing with regard to the necessity of internal medication, either popular or professional in its origin, an *a priori* scepticism which refuses all personal investigation, hasty generalizations from inconsequent or too meagre data,—can, in my opinion, be eliminated only by a systematic plan of experimentation conducted by no one person, but by a committee of competent observers fairly selected.

It would not be boastful to say that nowhere does there exist a body of dermatologists so broadly cosmopolitan in spirit and training, and representing such varied opportunities of research as are afforded by wide differences in climate and race, or one more competent for such work, than the gentlemen who compose the American Dermatological Association. Let us suppose that such a committee were organized, what should be its scope, what its methods of work? A member presents a paper upon the specific effect of some drug in this or that affection, or upon the action of some class of remedies in certain pathological changes of the skin, or upon the properties of some new remedy. Ordinarily his conclusions would be supplemented by the expression of the views of others more or less positive in support or negative in opposition. If the matter were novel, criticism would be little else than theorizing, and there the subject would generally rest. There would



be very little enquiry as to the extent of the data or the accuracy of the methods upon which the conclusions offered by the writer were based, but little action here which would stamp the communication as of more exact value to medicine than had it been published simply in journal form. By such treatment the society fails to fulfil one of its highest duties to the profession in general, in allowing any thing to receive its apparent sanction which shall add to the present inexactitude of cutaneous therapeutics, and in proper appreciation of the author's labors, who should court the investigation of an impartial and expert enquiry, knowing that in this way would their merits be most freely accepted by the medical public. In this way, too, the society would do much to discourage the loose writing and the claims based on insufficient observation, which generally herald the introduction of each new remedy. One would hardly venture to announce here a novelty in therapeutics, unless the discovery were based upon methods of investigation employed by such a committee in subsequently testing its value. To it might be referred not only all appropriate communications presented to the association, but all doubtful questions of importance in therapeutics, which now vex us so frequently, of old or new origin.

I will cite a few which suggest themselves to me by way of illustration.

The action, beneficial or injurious, of our most celebrated springs in affections of the skin. A report upon this important subject would do much to clear away the atmosphere of charlatanism which has hitherto obscured it, and develop some knowledge of certain character regarding it which the profession of this country has so long needed.

The power of electricity over the so-called neuroses of the skin (including zoster).

To what extent may certain substances in common use be applied to the skin without danger, viz. : compounds of zinc, lead, mercury, carbolic acid, etc.

Such would naturally be the scope of the committee's labors ; the methods employed would be of necessity limited in some respects. Unfortunately we have in this country

few hospital wards devoted to the care of skin diseases, where, under the observation of competent dermatologists, the action of remedies may be properly studied. Our conclusions must be formed almost wholly from the voluntary visits of out-patients, whose conduct between the same is entirely without our knowledge, and from the almost as unsatisfactory class of private patients who come to our offices. In both, the character of the drugs, the amount and frequency of administration, the regulation of counteracting influences, and other conditions essential to reliable investigation, are not under our direct control. It is by the number rather than the quality of our observations that we now arrive at any definite information. Still, with such opportunities at our command, we may do much in promotion of this object. The committee would hardly be satisfied, however, with a collection alone of loose opinions already formed upon such data in their investigation of any question, interesting as such information would be, as they would be merely balancing conclusions from many observers, formed, it may be, under conditions quite dissimilar and irreconcilable even with the accompanying information of the methods of research employed. The committee would naturally formulate a series of questions covering the whole ground, so framed that at least all error from inexact or insufficient observation would be excluded. The results thus obtained, after presentation in proper form to the association for discussion, would eventually go out to the world with an authority which would command credence everywhere. Such a plan is in no way impractical, although as yet unattempted. This association should not hesitate to demonstrate its ability to execute it.

I think that nothing would more easily convince members of the necessity of taking some immediate step toward placing the study of internal therapeutics in our specialty upon a scientific and progressive basis, than to read over in connection the brief chapter with this heading in every modern publication on general dermatology. I do not so much refer to the differences of opinion they contain, but to the almost total absence of fixed knowledge upon which



any generalizations may be based, and without which, of course, such differences of opinion are inevitable. It may not be inappropriate to attempt to expose here in concise form the meagreness of such knowledge. It may perhaps be best expressed in the form of an analysis of the limitations of our control over the different pathological processes which constitute our general divisions of individual diseases.

1. *Affections of the Glands.*—We have here included a group of disorders caused by increased, diminished, modified, or retained secretions. How far is it possible to influence the functions or mechanical processes of these glands by the internal use of drugs? We can stimulate the general cutaneous circulation, and thereby produce a free perspiration; we can awaken the sweat glands to excessive activity by jaborandi; we can create also a dryness of the skin by dangerous doses of well-known substances, but we are unable in this way to permanently relieve the habitual conditions of hyperidrosis or anidrosis, or by other means to alter the quality of the perspiration, so far as its color or odor is concerned. Our power over the action of the sebaceous glands is even more limited. I have seen it stated that the free use of certain oils will increase the amount or fluidity of the sebum excreted; I am unable to say from experience how correctly, but I doubt if any article of the *materia medica* can be put into the circulation capable of directly correcting a seborrhœa or removing the minutest comedo. That a milium or wen has not been resolved in this way goes without saying. That the sluggish action of the glands, associated with a chlorotic habit, may be to some extent indirectly influenced by ferruginous and other tonics, is not improbable.

2. *Inflammations.*—In connection with the great group of diverse affections exhibiting in common the pathological phenomena of the cutaneous tissues we call inflammations, the first question which should naturally suggest itself is: What agents have we capable of addressing themselves to this condition as such, directly or specifically? Have we such as are able to reduce or divert the cutaneous hyperæmia locally or universally? In the most acute types of cutane-



ous inflammation, of which the erythemata and some stages of eczema are marked examples, I have made thorough trial of such internal remedies as are claimed to act immediately upon it, as the acetates, citrates, and sulphates of the alkalies. I am not prepared to say to what extent I believe that they may affect this condition, or, if at all, in what way. I am willing to admit them as possible adjuvants of limited power. But among all the other articles of the materia medica which enjoy the reputation of being antiphlogistic, upon whatever theory it may be based, I know none capable of exerting such influence upon simple cutaneous inflammations. But in the great bulk of clinical features pathognomonic of this numerous group of diseases, we have to deal with many other conditions besides simple inflammation; its sequelæ and accompanying tissue changes are manifold. The remedies found in fact most serviceable in the treatment of these affections might be of direct injury in their most inflammatory stages. But the number of these of assured efficacy is very small. *Facile princeps* is arsenic. Yet nothing illustrates more forcibly the paucity of our internal remedies in skin diseases than the universal rôle of sole specific which this substance fills. There is scarcely any affection in which it is not given by the profession with routine constancy. Its powers, however, are unfortunately very limited. For outside of this group it may be said to be powerless, while within it its action is positively injurious in the most inflammatory states of the skin, and of real service only in a very small proportion of the affections included in it. When I mention psoriasis, chronic eczema, lichen ruber, and pemphigus, I have named all of them in which we can confidently rely upon it in any great measure. Even in these we know how often it utterly fails to accomplish what we expect of it, and how impossible it is to predict in any individual case, however favorable apparently, the measure or rapidity of its success. Upon the permanency of its influence in the recurrent forms of these diseases we cannot depend. There may be other members of this family in which arsenic is claimed to be of service, but the evidence of such belief is unsatisfactory.

But looking beyond arsenic what do we find upon which we can rely for aid in the management of this group? Tar and carbolic acid have been recommended by acknowledged authority in psoriasis, but they have not given general satisfaction and are little used. Iron and cod-liver oil are no doubt of moderate service, in some of the chronic affections especially, but usually only so far as their support is demanded by the general condition of the patient in individual cases. That they have any direct, specific action on the pathological condition of the cutaneous tissues I have seen no evidence. As to the antagonistic power of these and numerous other drugs over imaginary and undemonstrated conditions of the system in general, its fluids, functions, or organs, which play with some an important rôle in the etiology of these diseases, I will say nothing here. I am willing to acknowledge every success in therapeutics, on whatever theory it may be based, only the results must be real and demonstrated. It would be as easy and logical to argue back from the failure of such drugs to cure these affections independently and uniformly: that the latter can be in no way connected with such etiological conditions of the economy, as to draw opposite conclusions from their occasional usefulness.

3. *Hemorrhages*. Without attempting to define the questionable relations of hemorrhage into the cutaneous tissues to the dermatoses, or to explain the method of their existence, we may claim that we can control it in some measure by the internal use of the persalts of iron, by ergot, and other styptics.

4. *Hypertrophies*.—Is there any one disposed to claim that he can by internal medication control in the slightest degree any hypertrophy of the cutaneous tissues, from the most superficial keratosis to morbus Herculeus? Some of the incidental conditions connected with these affections, causative, it may be, or secondary, may be in some measure thus influenced, but not an established hyperplasy by a single cell, not a minute wart more than a Pfundnase.

5. *Atrophies*.—So too with the atrophies. We have not the power to restore a single pigment cell in leucoderma or canities by such means, or to add a new hair in alopecia.



6. *New growths*.—I doubt if there is any one so enthusiastic in drugs as to claim for them any influence over the development of the new-growths of the connective tissue, of the angiomata, sarcoma, or carcinoma. In lupus disease, the scrofuloderma, and syphiloderma we are by no means so powerless. In iodine we possess the means of restoring a healthy, conservative action in the most advanced tissue changes in the last two groups of diseases, although its efficacy may be restricted to their local and immediate manifestations. In lupus its beneficent effect is doubtful and very limited. In the syphiloderma we find our type of specific therapeutic action in the effect of mercury: an agent which works surely and uniformly, and, in large measure, thoroughly. It may all the more be regarded as possessing specific action, because in all other diseases of the skin it has little, if any power. In leprosy, several new remedies have been lately employed, but there is no evidence extensive enough at present to warrant a more favorable prognosis, either in respect to mortality or duration of the disease, than in past centuries.

7. *Ulcers*.—For ulcers as such we have no internal remedies of special application, although as advanced expressions of a depraved condition of the tissues they may be often benefited by many.

8. *Neuroses*.—I know no internal means of relieving the forms of anæsthesia and hyperaesthesia included in our restricted definition of the neuroses, whether of reflex or local origin, excepting those which temporarily blunt the sensorium to the fact of their existence.

9. *Parasitic Affections*.—Of the parasitic affections it may be safely said that, however much some may insist upon the importance of internal treatment in their management, there was never an instance of the cure of one of them by such means. When it can be shown that an itch insect or a louse has been slaughtered, or a single spore made unproductive by turning parasitocides into the stomach of the host, the importance of this channel of attack will be evident.

The number of individual affections of the skin recognized by us approaches closely one hundred. How many of these

are under the direct control of internal medication in any uniform or marked degree? I wish that I might claim such power over ten of them; such power as arsenic may exhibit in psoriasis, as mercury almost always does in syphilis, and which makes external treatment unnecessary. Even in respect to these exceptionally effective drugs, arsenic, mercury, and iodine, it cannot be said that they may not largely do their work upon the cutaneous tissues by direct local influence in the dermal circulation.

In this brief muster of the slim forces, which constitute our only reliable resources of internal medication in skin diseases, pessimistic as such a catalogue may seem to the sanguine practitioner, I have of course not intended to deny that much may often be done to hasten their good work by the simultaneous use of remedies which elevate the general tone of the patient's functions and tissues when needed, and the same is true of their action in many cases where we rely wholly upon local treatment for cure; but it would be impossible even to enumerate them here, as we are not discussing general therapeutics. There are innumerable coincident conditions associated with the dermatoses which may influence their progress, although they have no direct etiological connection with them, and which demand our attention. In other words, we have always our whole patient to consider. I do not, however, believe that these narrow limitations may not be enlarged, and I would encourage any experimental studies, empirical or philosophical, in this direction. It is the manner in which this important subject has been hitherto so generally treated, so detrimental to scientific progress, that I deprecate. But a frank confession of our present inabilities is an essential step in any real advance.





